5

TRANSPORTATION

Early in the process of developing the Eisenhower East Plan, the Planning Commission and City Council realized the importance of transportation in the future development of this area, both in terms of the amount and type of development and the future character of the area. The desire of policymakers to see Eisenhower East develop as a lively, mixed-use environment with office, retail and residential uses, supported by open space, recreation, entertainment, and cultural activities, implied that the transportation plan elements must provide adequate capacity while minimizing the impacts of traffic.

In 2001, faced with multiple planning applications totaling several millions of square feet of development, the City undertook a traffic study to determine the traffic impacts related to the Eisenhower East area if it was to be developed at the maximum densities under the current zoning. This study indicated that major intersections along Eisenhower Avenue failed or required unacceptable numbers of multiple turning lanes to improve the performance of the roadway system.

The failure of the current transportation infrastructure to support the zoning-driven land uses and the physical and aesthetic concerns about the development proposals was a major impetus for the City to prepare the Eisenhower East Plan. A plan for development that protects and enhances the character of the City implies a transportation plan that supports transit use to the maximum extent achievable, with pedestrian-friendly streets.

Transportation Objectives

Given the vision for Eisenhower East, the following key objectives for the transportation elements of the plan were established:

- Development should be coordinated with available transportation capacity;
- Access should be improved to and from the Capital Beltway and Duke Street;
- Improvements should be made to enhance the existing transit facilities;
- Single-Occupant Vehicles (SOVs) should be reduced;
- Safe, convenient pedestrian and bicycle options should be provided;
- Pedestrian friendly streets should be provided;
- Public transit modes should be linked within and without the neighborhood; and
- A District Transit Management Program should be established.

Figure 5-1 View South From Eisenhower Avenue toward "South Carlyle Square"

Transit and Supportive Design Principles

The land use strategies, physical layout, and urban design characteristics are treated in greater detail elsewhere in the Plan, but it is important to note the transportation impacts of these principles.

Most of the land area of Eisenhower East is within a 1,500-foot radius of a Metro station (either the Eisenhower Avenue station or the King Street station). A high level of transit use will be needed to minimize traffic impacts and support the levels of development that are anticipated. Transit trips almost always involve a pedestrian trip at one or both ends of the transit portion of the trip; thus, making the pedestrian trip attractive has a major impact on the increasing the use of transit. Pedestrian supportive design principles included in the Plan involve:

- Establishing an interconnected grid of streets that results in short blocks;
- Ensuring a higher intensity of land use at the Metro station area;
- Creating a mix of uses overall and at the Metro station areas, so there is pedestrian activity at all times of day, not just peak hours;
- Providing active retail uses on the street facades;
- Designing streets of minimum widths and/or pedestrian islands, where appropriate, to facilitate pedestrians crossing the street;
- Developing parking strategies that minimize the impact of parking structures, and
- Creating an urban boulevard along Eisenhower Avenue to provide a pedestrian-friendly link to the Metro station area.

Given the desire to minimize traffic impact, any and all steps that can be taken to make using transit attractive should be implemented. The proposed street grid, street widths, mix of uses, and Eisenhower Avenue urban design elements all address the needs of pedestrians, and are integral to the development of the overall transportation plan.

These elements are developed and illustrated in the urban design section in greater detail, where the street systems relationship to the overall vision and its consistency with the character of Alexandria are discussed. The key point is that making the pedestrian part of every trip attractive, direct and safe also supports the desired transportation system.

The Overall Transportation Plan

Consistent with the Land Use/Circulation Strategy outlined earlier, the overall transportation plan developed in response to the goals and objectives for the area involves seven key strategies which are mutually supportive, and have been developed in concert. They include establishing:

1. An urban network of streets and regional highway access;
2. A land use strategy to locate uses close to the Metro;
3. A land use strategy to create a balance of jobs and housing;
4. A pedestrian friendly community;
5. A reduction in development intensity;
6. A district wide transportation management program; and
7. An optimized parking program policy.

Streets And Regional Access

The planning process included a continuing effort to ensure that the combination of highway access, local streets, and transit services would be adequate to support the potential development. This process is an iterative process, involving analysis of potential land use scenarios within the context of existing and planned regional transportation improvements, followed by assessment of options for the planning area, and then adjustments in the planned level of development and mix of uses.

This effort was then followed by additional assessment of the amount of traffic to ensure that the proposed street network and regional access will be adequate—given reasonable assumptions about the potential for non-SOV usage by future workers and residents in the area.

Prior to beginning the Eisenhower East planning process, the City contracted with Wilbur Smith Associates (WSA) to perform traffic studies related to the planning area. Initially, the *East Eisenhower Valley Traffic Study* developed trip generation estimates for both the near term and for the maximum potential development scenarios, based on the existing zoning.

That effort included assumptions regarding the potential for trip reduction based on transit usage, ridesharing, use of alternative modes, and increased internal trips due to mixing of uses. These trip reduction factors were based on the ITE Trip Generation Handbook, and reported experience in Arlington, Bethesda, Silver Spring and elsewhere.

However, when the 2020 maximum build-out generated trips were converted into peak hour volumes and distributed to the network for the level of service analysis, this study revealed that the cross section of Eisenhower Avenue would need to be increased, with a basic six-lane configuration and up to three auxiliary turn lanes at key intersections, and that Mill Road, Jamieson Avenue, Holland Lane and Stovall Street would require four-lane cross-sections with auxiliary left-turn lanes.

In addition, significant external capacity issues into and out of the land bay were identified, including the capacity limitations associated with access to Duke Street, and capacity issues at the Capital Beltway ramp to Stovall Street.

Some specific roadway improvements were identified by Wilbur Smith Associates, and the study team recommended several policies and strategies to mitigate the traffic impacts. These recommendations included: a mixed-use balance between housing and office to reduce the number of auto trips, a reduction in the intensity of development, a grid of urban streets, a district wide Transportation Management Program (TMP), a limited supply of parking, improved local transit alternatives, an improved pedestrian circulation system, an expansion of the Metro platform to the north side of Eisenhower Avenue. All of these recommendations are included in the final plan.

Analysis of Alternative Access Concepts

Significant traffic pressures are created with the current proposal for the State to connect the Capital Beltway express ramps directly to Mill Road. The concerns generated about the intersection of Mill Road with Eisenhower Avenue led to further analysis of how to accommodate the highway access into the planning area.

The team studied several alternatives and the Plan recommends the construction of a new Southern Street extending from the Capital Beltway ramps westward on the southern side of the study area and then under Eisenhower Avenue to provide access to Block 2. Another roadway providing further distribution options connects Mill Road, south of Eisenhower Avenue to Elizabeth Lane. This roadway crosses a Resource Protection Area and will require a sensitive design that minimizes any environmental impacts.

The Southern Street requires modification of approved VDOT plans for the runout areas at the foot of the Capital Beltway ramps and will require coordination with WMATA because of the proximity to the Metro station; however, this roadway provides several key benefits. This road will alleviate significant congestion on Eisenhower Avenue, provide additional Metro access, and reduce turning volumes on Eisenhower Avenue. At the Eisenhower Avenue/Mill Road intersection the left turn lanes could be reduced from two to one, and the right-turn lanes eliminated, significantly reducing the cross-section and enhancing pedestrian access.

Impact on Trip Generation and Peak Hour Volumes

Parking policies are included that impose maximum parking provisions by use. The Mill Race project that recently received City approval with a comprehensive TMP offers a model for future development.

The City asked Wilbur Smith Associates to revise the trip generation estimates to reflect potential increases in the trip reductions due to the parking restrictions, the district TMP concept, and the

other land use strategies included in the Plan. WSA analyzed the strategies included in the Plan and updated information based on recent data from the Ballston-Clarendon corridor in Arlington to calculate new trip generation and auto traffic volume estimates.

The resulting overall vehicle trip reduction factor was 43 percent; meaning that 43 percent of the traffic generated by the proposed development would use modes other than SOVs.

This is a significant improvement over the 32-percent trip reduction factor found in the assessment of the maximum potential land use scenario in the original Eisenhower East study.

A major reason is that the proposed land use scenario has much more of a balanced mix of office and residential than the original scenario, which was largely office (causing a mass entering and exiting of the study area during the peak periods).

Other elements of the transportation plan are all focused on achieving at least this level of non-SOV usage, including managing the parking supply, improved transit, Transportation Management Plans, and bicycle/pedestrian supportive requirements.

Parking Policy

Given the goal of reducing vehicle trips, particularly in the peak hours, the Plan's parking strategy provides for adequate parking for the level of SOV use identified in the traffic plan, but provides incentives for both employees and residents to use transit or other alternatives to the maximum extent possible.

The basic philosophy is that transit access to the study area or ridesharing should be the preferred mode for those who would park all day if they drove (office employees, typically), and for those who live in the area as they leave to go to other employment destinations. There must be adequate short-term parking for office visitors, and retail and restaurant uses must have a relatively high supply of short-term spaces to be viable.

The Plan's parking requirements are outlined in the Land Use and Circulation section (above). The parking facilities are to be operated to maximize sharing of parking resources, so that the overall supply needed can be reduced by having multiple users at different times of the day, and includes provision for pricing long-term office parking for SOV commuters at market rates.

On-Street Parking:

- All on-street parking should be maximized for short-term daytime parking through the use of meters, signage, and enforcement of maximum time restrictions (to minimize meter-feeding). Pricing should encourage short-term use, with on-street parking (during the day) priced higher than garage parking.

- Eisenhower Avenue west of Mill Road will have on-street parking in the right lane 24 hours a day until the traffic reaches the volume that would require removal in the peak traffic periods.

- Eisenhower Avenue east of Mill Road will have short-term on-street parking except during the AM/PM peak traffic periods on Monday thru Friday.

Implications of the Parking Strategy

The Plan's maximum parking requirements will affect the new development within CDD 2 and CDD 11. For the new office uses, there are approximately 6,600 spaces to serve a projected daily attendance of 11,100 (at 3.5 employees per 1,000 gross square feet, including a 10 percent absentee factor).

Within 1,500 feet of the Metro stations, this implies that 43 percent of the workers will have to be non-SOV; i.e., will arrive on transit, foot, bicycle, car, or vanpool. Outside the 1,500-foot area, the non-SOV mode share will have to be 19 percent, and overall the combined mode share required by these parking requirements is 37 percent.

The office requirements for Eisenhower East also include an additional 1,200 short-term visitor spaces, which allows for access by those who are not daily commuters. It should be noted that the proposed Eisenhower East requirements are comparable to the maximums also contained in the Patent and Trademark Office Transportation Management Plan, which averages 1.725 spaces per 1,000 square feet of office area, and is consistent with the TMP approved for the Mill Race project.

The 37 percent non-SOV mode share implied by the office parking maximums is slightly less than the overall trip reduction factor (non-SOV trip percentage) estimated separately by WSA for the same potential mix and amount of land uses, which is predicted to be 41 percent.

The WSA study also used data from an Arlington County parking supply inventory, which found parking ratios of 1.7 spaces per 1,000 square feet in the comparable Courthouse area of Arlington. (Arlington County had previously required 1.72 per 1,000 square feet as a minimum in that area but is now moving towards a 1.0 spaces/1,000 standard). Arlington County had also surveyed employees in that area, and found a 55 percent SOV mode share in that area, with a combined 45 percent non-SOV mode share.

Given this data from the trip generation study performed by WSA, the non-SOV mode share required by the Eisenhower East parking strategy is achievable, given comparable TMP efforts.

In addition, it should be noted that it appears that the parking requirements for Eisenhower East offer a bit of a safety margin, in that the parking requirements needed to achieve a 37 percent non-SOV mode share; however, the traffic study forecasts a 41 percent non-SOV share (trip reduction).

The residential parking requirements are also maximums, and they also imply high transit mode shares: 45 percent near Metro, and 35 percent beyond 1,500 feet, for an overall share of 40 percent non-SOV. This also is comparable to the 41 percent overall trip reduction factor, and is expected to be achievable based on Alexandria's prior experience with King Street and Carlyle. Residential visitor parking is not explicitly included, as shared parking with nearby parking for offices should cater to overnight visitors, and on-street parking will also be available. The City has estimated that the proposed grid street network would provide approximately 1,200 spaces, which should be short-term during the day but allow extended parking in the evening and at night.

Retail parking ratios are set with the assumption that there will be shared parking with office uses, and that short-term on-street parking will also be available for retail users. It is recognized that successful retail and restaurant uses require an adequate parking supply, as transit use for these trip purposes is likely to be low.

Although this parking strategy will in itself create incentives for commuters and residents to use modes other than SOV, successful implementation will also require the full implementation of a Transportation Management Plan, if the non-SOV mode share is to be achieved.

Transit

The Eisenhower East area is currently well served by high-capacity transit that links the area with the region. This includes Metro service on the Blue and Yellow Lines at King Street Station (much of the planning area is within 1500 feet of the station), and Metro service on the Yellow Line at Eisenhower Avenue Station. Virginia Railway Express (VRE) service from both the Fredericksburg and Manassas lines stops at King Street Station, as does Amtrak.

Existing bus service in the study area is more limited. Alexandria DASH route AT7 (Landmark Mall to King Street) serves the Eisenhower Avenue Metro Station and is the basic bus service in the study area. DASH AT2 links the Braddock Road Station with the Van Dorn Street Station via Seminary Road.

On weekends and in the rush hours, the route is extended from Van Dorn Street to Eisenhower Avenue Station, via Eisenhower Avenue. Metrobus routes N11 and N13 serve the Eisenhower Avenue Station, linking the study area with the Branch Avenue Metro station in Prince George's County, Maryland.

The long-range plans for the Metro system include the expansion of the Yellow Line to connect the Branch Avenue Metro Station with the Huntington Metro Station in Fairfax County. Huntington Station is the terminus of the Yellow Line to the south of the Eisenhower Avenue Station.

The construction of this connection, should it come to fruition, would greatly enhance the transit opportunities for commuters and shoppers into and out of Eisenhower East.

The transit elements in the Plan build upon the availability of transit, encouraging a very high level of use through transit incentives such as employee transit subsidies, improved information, etc., and through auto use disincentives, such as the parking policies described in the TMP and parking sections. The primary new transit service that is proposed is the development of a shuttle serving the district, and the major transit capital investment of a new entrance to the Eisenhower Avenue Metro station.

Eisenhower Shuttle

Research on transit use among people with trip origins or destinations at different distances from rail transit confirms that very high levels of transit mode shares can be expected within 1,500 feet of transit stations.

In addition, high-quality shuttle services can extend the high usage "shed" around transit stations, raising transit ridership. In the Eisenhower East planning area, such a shuttle is proposed to operate between the two Metro stations (King Street and Eisenhower Avenue) to provide a connection from the areas beyond 1500 feet of the stations to either of the stations. The areas are primarily the southeast corner of the planning area, including part of the PTO complex. In order to ensure residents, employees and shoppers in this area have a reason to use transit, the Plan calls for the development of a shuttle that combines these characteristics:

- Distinctive, attractive vehicles such as low-floor buses in special paint schemes, rubber-tired trolleys—to differentiate it from the conventional transit services.
- Free to the user, with no perceived fare.
- High frequency of service
- Distinctive, well-marked stops, with shelters at key points, and real-time arrival databased on automatic vehicle location (AVL) technology.

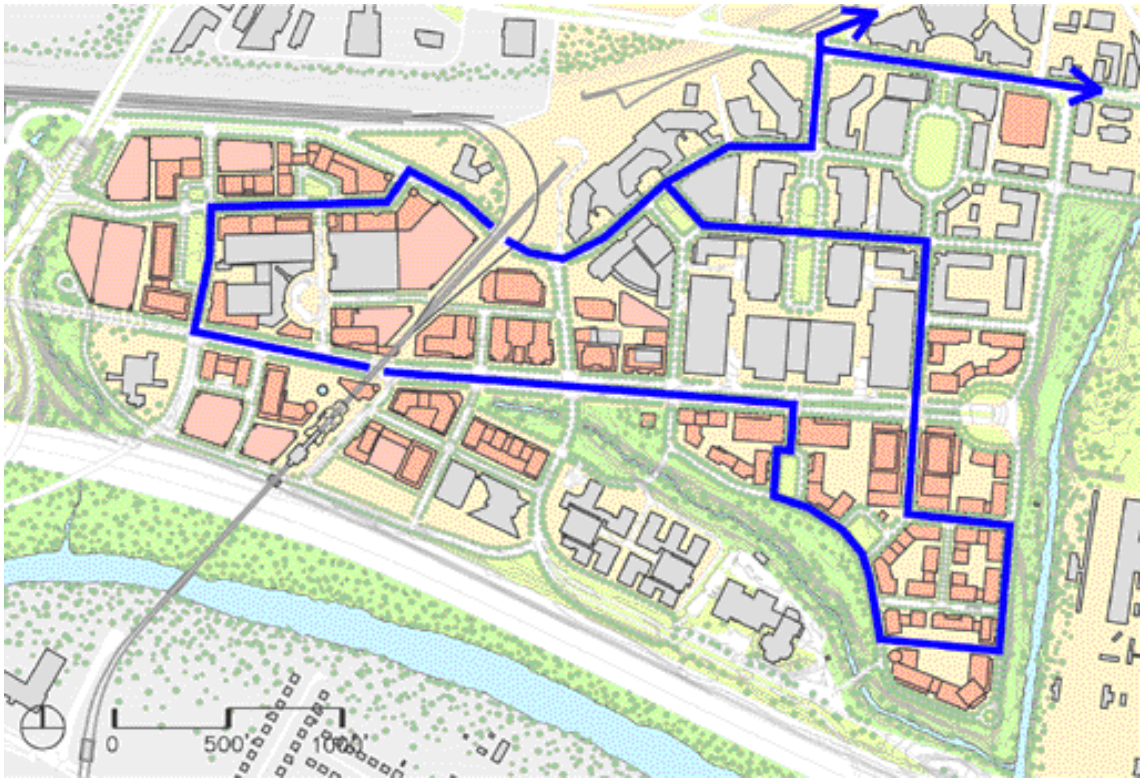

Figure 5-2 High Coverage Shuttle Route

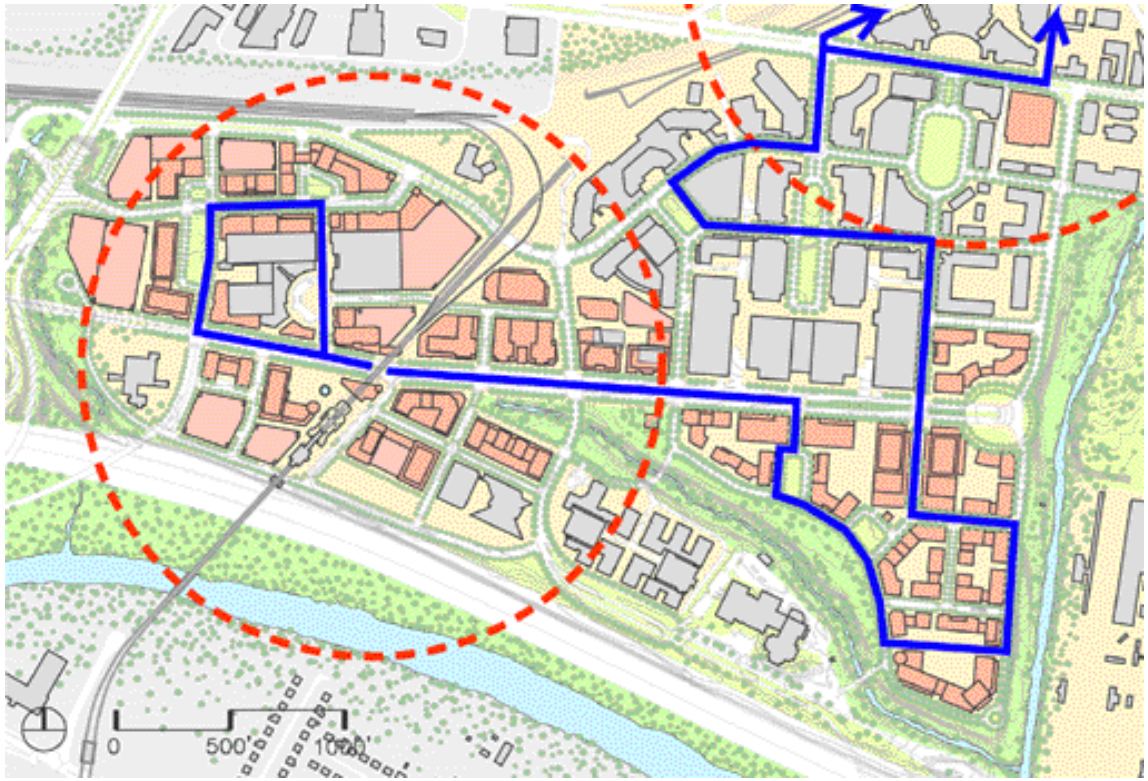

Figure 5-3 Low Coverage Shuttle Route

Examples of such Metro-extending services can be found elsewhere in the region, such as the ARTS buses in the Crystal City area, the Bethesda 8 in Bethesda, and the VanGo in downtown Silver Spring. Another example of a successful shuttle is the "blue bus" operated between Dupont Circle Metro, Georgetown and Rosslyn Metro, and along K Street in the District of Columbia. This privately-owned shuttle is operated by a contractor for the Georgetown Partnership, the Business Improvement District for that area. Ridership has been well above expectations, with current ridership at 4,000 persons per day on 10 buses. The service was originally planned for 800 boardings per day on six buses.

While the exact routing will need to be determined with Plan implementation, a conceptual shuttle route with a high level of coverage is presented in Figure 5-2 High Coverage Shuttle Route.

A more direct route alternative may be preferred, because usage will be low if potential users perceive that walking is faster; a more direct alternative concept is presented in Figure 5-3 Low Coverage Shuttle Route. The exact route may well need to be defined based on the site plans for the southeast corner of the planning area.

A related transit service option involves extension of the shuttle concept to provide additional links to other neighborhoods in Alexandria. Extending the shuttle past King Street Station to Old Town

would address the Metro connection link in that area, as well as tie together these three activity centers. Similarly, future plans for the Eisenhower West planning area may well consider an extension of the Eisenhower shuttle to the Van Dorn Station or beyond. This may involve restructuring DASH routes to provide higher frequencies in this corridor, and include the link to Old Town. A detailed approach should be explored further as part of the district-wide Transportation Management Program.

New Entrance to the Eisenhower Avenue Metro Station

The other major transit access improvement included in the plan is a new entrance for the Eisenhower Avenue Metro Station on the north side of Eisenhower Avenue. Currently the only station entrance is on the south side. The traffic study called for the new entrance, and the Mill Race Special Use Permit now includes an easement for pedestrian access to a north side station entrance, and easements for construction of an extended platform and entrance. With the opening of the north side entrance, a small Kiss-N-Ride area could be located on Grist Mill Road, just to the north of the new station entrance.

In the interim, before the extension and new entrance are constructed, the developer will provide and maintain the space intended for this station as open space. It is across the street from the main station entry area and bus interchange point. A conceptual design for this new entrance

Figure 5-4 Eisenhower Avenue Metro Station

has been prepared by WMATA. Its construction is desirable (as a midterm improvement –2010-2015) in order to accommodate the growing transit needs as the area develops.

Bus Access

The current Eisenhower Avenue Metro Station design provides for buses to pull off Eisenhower Avenue into a dedicated lane that provides dedicated bus stops located effectively under the station, with a short, direct and visible connection to the station entrance and the escalators up to the platform level. The Plan calls for buses to approach the east side of the Metro station either through a right turn from Eisenhower Avenue from the west or a left turn through a dedicated left turn harbor from the east. (See Figure 5-4 - Eisenhower Avenue Metro Station.) The Plan includes a direct drop-off to a landscaped plaza on the east side of the station. Buses will then exit to the south with movements to the east and west via the Southern Road.

Transportation Management Plans (TMPs)

As indicated above, the high non-SOV mode shares sought by the Eisenhower East Plan will require an aggressive Transportation Management Plan (TMP) to inform residents and employees of the options, to provide incentives/disincentives for alternatives to auto use, and to continually promote the options to SOV usage. The Eisenhower East Plan recommends the following elements as the basis for individual project TMPs, which will then form the framework for an area-wide Transit Management District (TMD) as development proceeds. The general TMP elements include:

- Programs and policies to promote Ridesharing
- Programs and policies to promote the use of transit, and
- Programs and policies to support other initiatives such as alternative work hours and telecommuting, and
- Transportation Management Coordinators to implement all of these transportation management strategy elements.

These elements are discussed in the following sections. Parking management and bicycle program elements are presented separately. It should be noted that these are not individual, mutually exclusive program elements, but that they must be combined with the parking supply policies and the transit service improvements already discussed to achieve the desired mode shares.

Ridesharing Information and Incentives

In order to achieve the overall non-SOV mode share, a significant number of employees will need to carpool or vanpool to work in the Eisenhower East area. This will require that all employees receive information about these options, their benefits, and how to find riders or a ride.

Matching of riders and drivers will be coordinated with the regional program, but there is also a need for a local matching program within each employer/development and Eisenhower East in general. The parking management strategy should also include incentives for rideshare users, such as free parking and dedicated "front-door" parking spaces.

Another element of this program that also supports transit use is the City's Guaranteed Ride Home program so that transit riders and others can get home if required to leave midday or after peak hours. All persons in the study area, who rideshare or use transit should be registered in the regional Guaranteed Ride Home Program, operated through the Commuter Connection program of the Washington Regional Council of Governments.

The City's ridesharing program can be used to register participants in the regional program, and a proactive effort to register all study area participants should be included in the overall TMP. Under this program registered transit and rideshare participants are provided with up to four free trips home per year by taxi or other means. This removes concerns about not having a car available during the day for emergencies, making transit and ridesharing more attractive to the potential user.

Transit Incentives

Transit subsidies for employees and residents are an important part of the overall Transportation Management Plan. Employees should be provided with discounted transit fare media. Federal tax provisions allow up to $100 per month in transit benefits to be tax-free and deductible as a business expense by the employer (as of the writing of this report).

Federal employees in the Washington area are provided with this full amount of subsidy, and it is anticipated that the federal policy will help increase the transit mode share for PTO and other federal employees in the study area. Comparable fare discounts will need to be included in the TMPs for other office developments that are not oriented to federal employees.

This subsidy can be provided most effectively through Metrochek or similar programs, and can be accomplished by requiring tenants to provide benefits as a condition of their lease, or by the developer through rent collections.

It is anticipated that this incentive is needed to raise the transit mode share above that typically found at Metro station areas, and that if the desired mode share is reached approximately 25-30 percent of employees will use the benefit.

Provision of discounted fare media to residents of the planning area may also be a potential element of the transportation management strategy. The purpose would be the same, to encourage transit use. While this is not widely done, traffic mitigation requirements are beginning to affect residential development, and this is one technique that can be implemented through lease offices and homeowner associations.

Initially the focus should be multi-family residential development further from the Metro stations, where an additional incentive may be needed to get residents to travel further to access the Metro.

Requiring promotion of short-term car rentals (e.g., Flexcar or Zipcar) to allow transit users the flexibility of making trips during the day to locations that are not transit accessible would also encourage transit usage. A recent innovation by WMATA is a contract with providers of short-term car rental at Metro stations (Flexcar is the provider), allowing transit users to travel to locations without local bus service, or to carry things that are difficult on transit. These short-term rental cars can allow transit users to avoid owning a second car.

The TMP calls for the provision of parking spaces in close proximity to the Metro station for Flexcar vehicles, and arrangements with Metro and Flexcar for usage of these short-term rental cars by employees and residents. Typically individual users must be registered with the car rental company. In this case, the TMP Coordinator would be able to provide needed information to potential users as part of the transit alternatives package. Flexcar requires a onetime lifetime membership fee of $25 for each user; the developer would be asked to pay this fee. Currently there are two cars available at King Street Metro, initially two spaces will be needed at the Eisenhower Avenue Station, with a likely increase as users realize the benefits of combining a transit pass with the availability of a short-term rental car for access to places not served by transit.

Other Initiatives

Traffic volumes into and out of the study area will be highest during the peak morning and evening hours. To the extent that these peaks can be flattened by spreading this volume over a longer period, the congestion can be reduced.

One way to address this is to encourage employers to offer alternative work hours, as an element of the Transportation Management Plan. Staggered work hours allow employees to travel at times other than the worst within the peak period. Alternative workweek schedules, such as four ten-hour days, move trips outside the peak periods and eliminate one round-trip per week. Such policies will be promoted to employers.

Reducing the total number of commuter trips is also a potential method of managing transportation demand. Technology now allows

many employees to work from home, or from telework centers—employers and employees need İnformation about implementation of telecommute programs, availability of telework centers, and there is a potential for incentives with equipment and communication expenses.

TMP Coordination

A TMP Coordinator is needed for implementing these transportation management programs and policies, whose responsibilities should include:

- Promoting transit, ridesharing, staggered work hours, parking restrictions and the other program elements to prospective tenants and to employers and their employees, and to residents in the residential buildings;
- Displaying and distributing current information about all transit, ridesharing, and other TMP elements to residents, employers, and employees—including transit schedules, rideshare applications and information, incentive information, parking information, etc. A website with this information and appropriate links to transit providers is provided;
- Promoting and administering a ridesharing program that includes not only participation in the regional Metropolitan Washington Council of Governments Commuter Connections Program, but also site-specific matching efforts;
- Promoting the Guaranteed Ride Home program as part of the ridesharing and transit marketing efforts;
- Administering on-site sales/distribution of transit fare media;
- Working with employers to assist in the implementation of transit fare subsidies and the development of appropriate parking policies for employees to discourage SOV commuting;
- Conducting annual surveys and reports of employees and residents regarding mode choices; and
- Implementing the parking management plan, including restrictions and incentives such as the free spaces for ridesharers, limits on monthly SOV parking, sharing of parking among uses, etc.

Over time, coordination will be necessary among the TMP activities required in the Hoffman Town Center and Carlyle PTO TMPs, as well as with the Alexandria Rideshare program and other commuter programs. It is anticipated that these functions can be consolidated in an Eisenhower East Transportation Management District in the future as build-out continues.

At that time the requirement for individual TMPs will be replaced by a developer contribution based on the square footage of the development, the amount set to meet the budgetary requirements of the program, including staffing, marketing expenses, shuttle operation, general and administrative costs, etc.

Overall, the approach is to provide disincentives to the use of the single-occupant auto for commuting into Eisenhower East, while making transit and other options as cheap and easy as possible. Given this structure, all elements may not be appropriate for each project, varying with the land use type, proximity to Metro, etc. However, a number of them are designed to address the entire area. Individual projects could be required to provide contributions toward any or all of the programs.

The overall strategy for Eisenhower East is likely to include the development of a Transportation Management District that would draw on the resources of each project for support in implementing an area-wide set of actions encompassing the elements listed above.

At this time the mechanism is not fully determined, but the concept is that at some point in the near future individual TMPs will merge into a Transportation Management District to implement these policies and programs throughout the Eisenhower East planning area.

The district has not yet been defined, but would likely involve a shift of project fees to the support of the area-wide program.

Parking Management

A parking management plan includes the elements described above, as well as implementation of the general provisions of the parking strategy as follows:

- Sharing of office and retail spaces with residential visitors;
- Short-term parking for visitors and retail, including appropriate pricing/collection methods to avoid use for all-day parking;
- Market rate parking for office employees, restricted to the number of spaces outlined in the Plan; and
- Free priority location dedicated parking for rideshare vehicles, including carpools and vanpools.

The parking supply requirements are predicated on making the most use of the parking supply, and the parking management strategy will combine policies on pricing and shared parking to address this goal.

Individual commercial projects will be permitted to include a substantial amount of short-term parking, and the available long-term parking may be underused evenings and weekends. However, residential visitors, retail, restaurant, hotel and entertainment uses will all create a demand for parking during these periods, and the owners and operators of the parking supply will have to manage the supply to allow these additional users access to the parking supply, rather than simply closing off garages after work hours.

In the Courthouse area, there is already a substantial shortage of short-term parking, due to the restriction on use of the Courthouse parking to employees only. The problem is currently being alleviated in the short-term through the lease of surface parking on the Hoffman and Simpson parcels.

Ongoing evaluation of this issue will be necessary as new development takes place. In the long run, a possible solution may be the development of a public parking facility that would facilitate shared parking between the daytime uses of the Courthouse (all-day and short-term) and nearby retail, entertainment and restaurant uses.

The sharing of parking, and preserving a sufficient supply of short-term parking, can be accomplished through a combination of pricing and permitting strategies, implemented in garages and on the street. On-street parking will be metered (during the day) for short-term use, and a dedicated portion of the garages will need to be hourly. Overall demand for all-day parking can be addressed by requiring that employees pay market rates for parking permits. Finally, ridesharing can be encouraged by reserving parking for ridesharers in prime locations, and making it free or substantially discounted.

Bicycle Program

Another goal of the transportation program is to encourage the use of bicycles for transportation as well as recreation. Recreational facilities aimed at cyclists and pedestrians are discussed elsewhere, but the bicycle is included here as an alternative access mode to the Metro, to work destinations in the study area and nearby parts of Alexandria, and for shopping and errands.

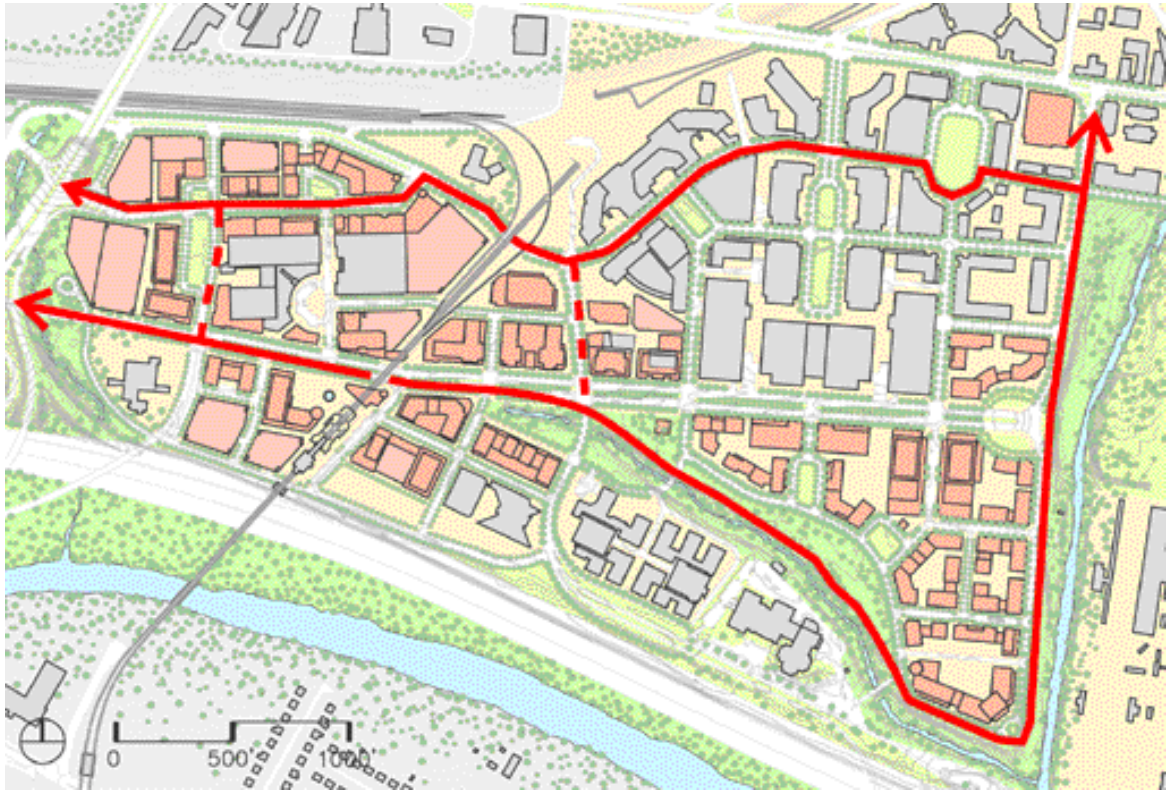

Figure 5-5 Bike Paths

The study area is relatively flat, and internal distances (as well as distances to Old Town, King Street, etc.) are relatively short, which should help make cycle commuting an attractive alternative. Following consultation with the biking community, it was decided that dedicated bicycle lanes would not be incorporated into the streets; rather the "commuter" cyclists will move with the autos within the normal travel lanes. (See Figure 5-4 for the location of bike routes.) Where the bike route is provided on-street, particularly along Mill Road and Jamieson Avenue, signage should be provided delineating the on-street route.

An off-road recreational bike trail is provided to connect the bike trail at the Eisenhower Avenue Bridge over Telegraph Road to Hooff's Run. The trail is provided as a component within the sidewalk design on the south side of Eisenhower Avenue between Stovall Street and the point where it can enter the RPA area just to the west of Mill Road. At that point, it will become a recreational trail within the RPA/Community Park, connecting to Hooff's Run and an off-road trail running north to Jamieson Avenue.

Bicycle plan elements include:

- Bicycle lockers at Eisenhower Avenue and King Street Metro Stations,
- Office TMP requirements for the provision of secured parking for commuters and visitors using bicycles,
- Office TMP requirements for the provision of changing areas, showers and clothes lockers for use by cyclists, and
- Retail TMP requirements for usable, secure bicycle racks for use by customers.

Examples elsewhere also suggest that quality bicycle facilities will attract commuters and shoppers. The plan also calls for linkages to other bicycle paths in the region, to allow commuters into the area a safe route.

SUMMARY

The implementation of a comprehensive program of transportation improvements integrated with the land use concepts is critical to the Eisenhower East Plan's successful implementation. New construction associated with the current Woodrow Wilson Bridge and Capital Beltway improvements will provide new access to and through the Eisenhower East area.

To achieve an acceptable level of traffic within Eisenhower East and the surrounding neighborhoods will require enhanced transit utilization coupled with roadway and pedestrian improvements. The Plan incorporates a range of strategies to increase transit use and accommodate the projected increase in traffic. These strategies include: creating a urban grid of streets; enhancing the pedestrian experience; concentrating development at the Metro; balancing jobs and housing; reducing development intensity; minimizing local trips; limiting off-street parking; and maximizing the use of transit through a district transportation management program. An analysis of the Plan's projected traffic indicates that the incorporation of these strategies within the Plan results in a reduction of traffic impacts from the zoning in place prior to the Plan's adoption, while enhancing the aesthetic and social qualities of the community.